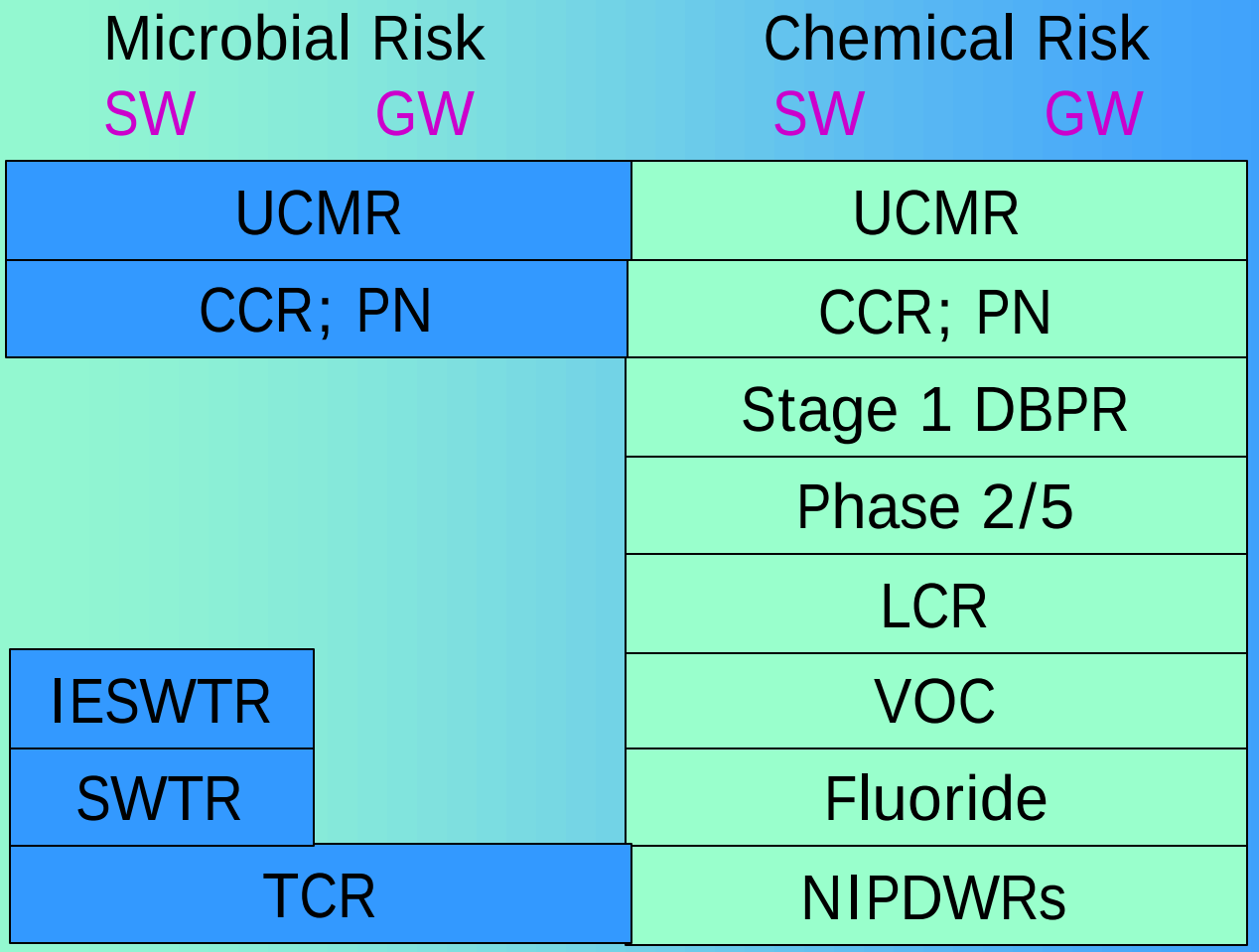
Assessing External Challenges

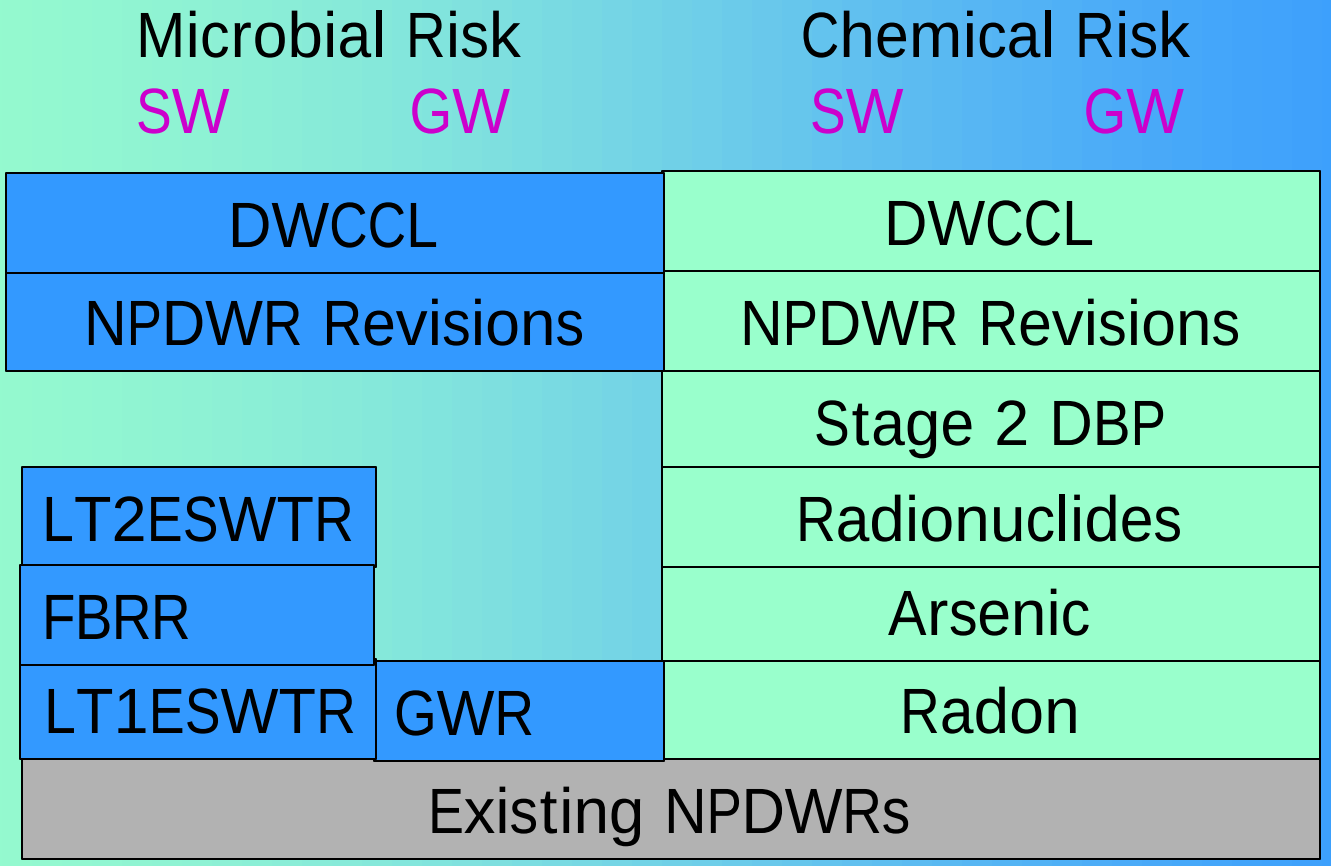
Regulation Overview for Small Systems

An Imposing Mountain

Existing Rules Reduce Risk



New Rules Address Newly Identified Risks



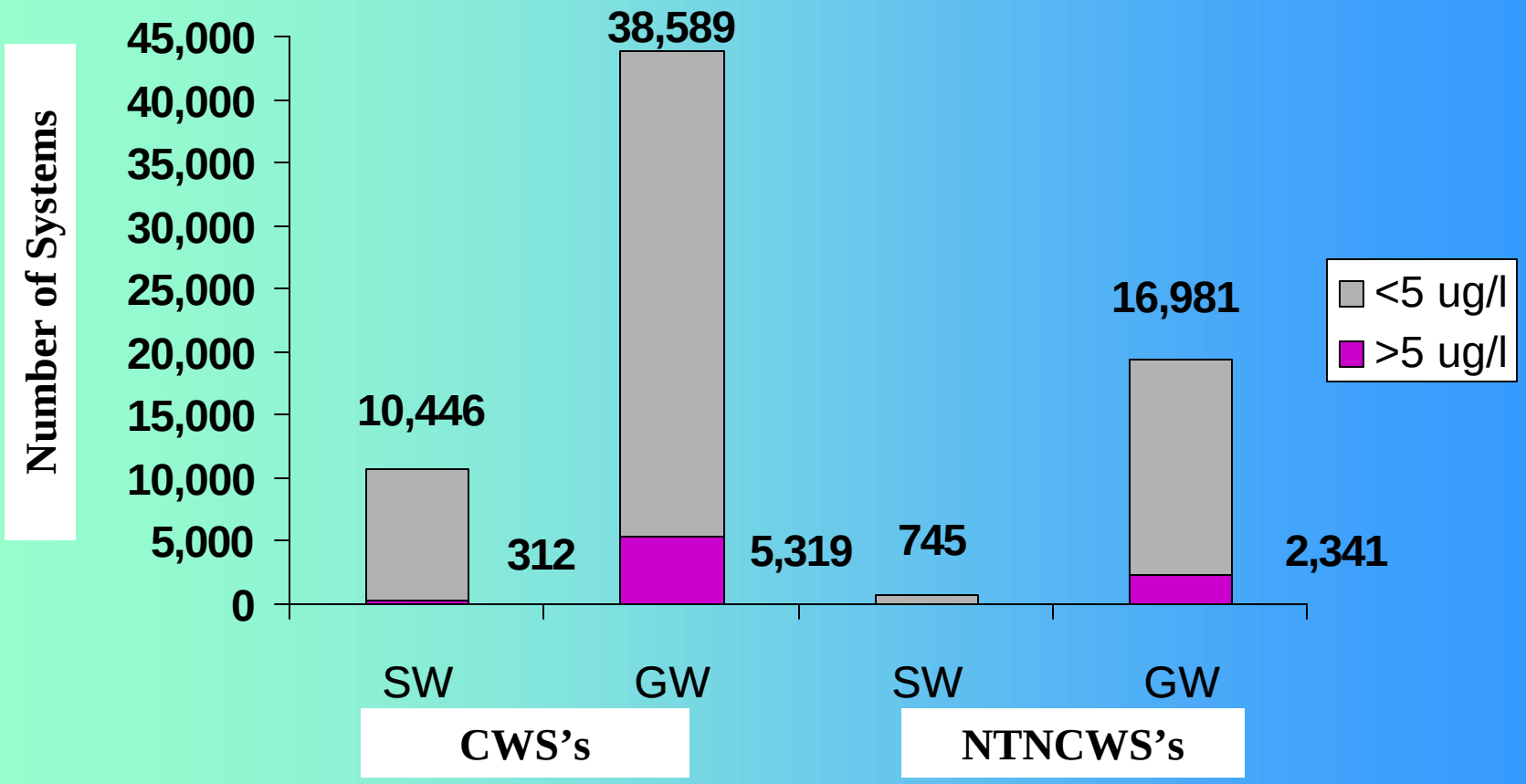
Arsenic

- Proposed June 22, 2000 (Sept. 20)
- Final Rule Due January 2001
- Goal
  - Establish an updated regulation to protect the public from health risks caused by arsenic in drinking water
- Applies to Community Water Systems
  - NTNCWSs to notify customers if MCL exceeded

Arsenic Proposed Requirements

- MCLG = zero
- Feasible Level = 3 ug/L
- Proposed MCL = 5 ug/L
  - Comments requested at 3, 10, and 20 ug/L
  - Proposed MCL was adjusted upward to where the cost is justified by the benefits
- Best Available Technology
- Compliance Monitoring and Reporting

Proposed Arsenic Rule - System Impacts



Radon

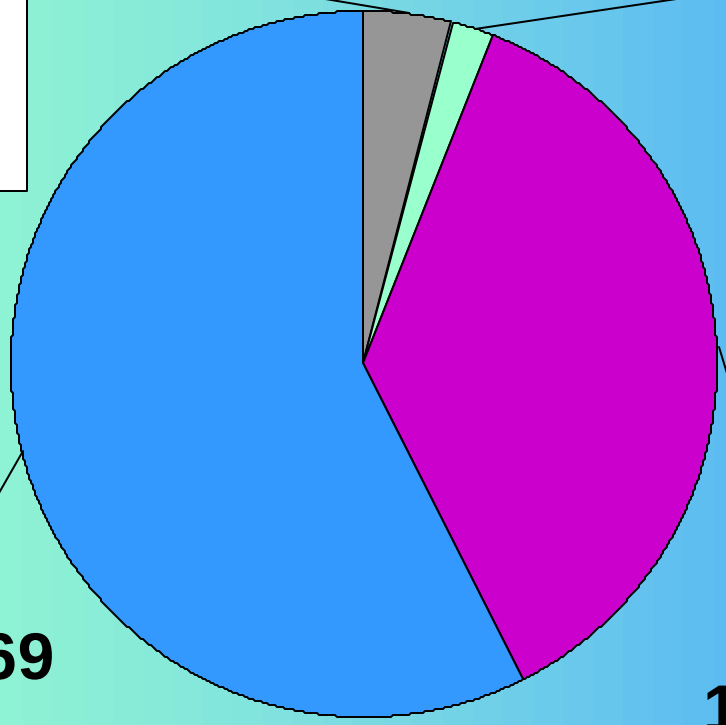
- Proposed November 2, 1999
- Final Rule Expected Fall 2000
- Goal
  - Reduce health risks to exposure to radon in drinking water
- Applies to All Community Water Systems Using Ground Water or Mixed Ground Water and Surface Water

Radon Proposed Requirements

- MCLG = Zero
- MCL = 300 pCi/l
  - Alternative MCL (AMCL) = 4,000 pCi/l
- MMM Program Assistance Document to Be Provided With Final Rule
- BAT, Compliance Monitoring, Reporting

- Option 1
  - State Develops Multimedia Mitigation (MMM) Program for Indoor Radon (to Achieve ❍ Risk Reduction)
- Option 2
  - No State MMM Program

Proposed Radon Rule - System Impacts



1,777

Systems with 1 or more sources >4000 pCi/L

932

Systems with one or more source >300 pCi/L that chose to mitigate

25,269

Systems with all sources <300 pCi/L

15,930

Systems with 1 or more sources >300 pCi/L that participate in a MMM program

Radionuclides

- Proposed Rule July 1991
- Notice of Data Availability (NODA) published April 21, 2000
- Goal
  - Protect the public against the harmful effects of radionuclides in drinking water
- Applies to Community Water Systems
  - Options presented for NTNCWSs

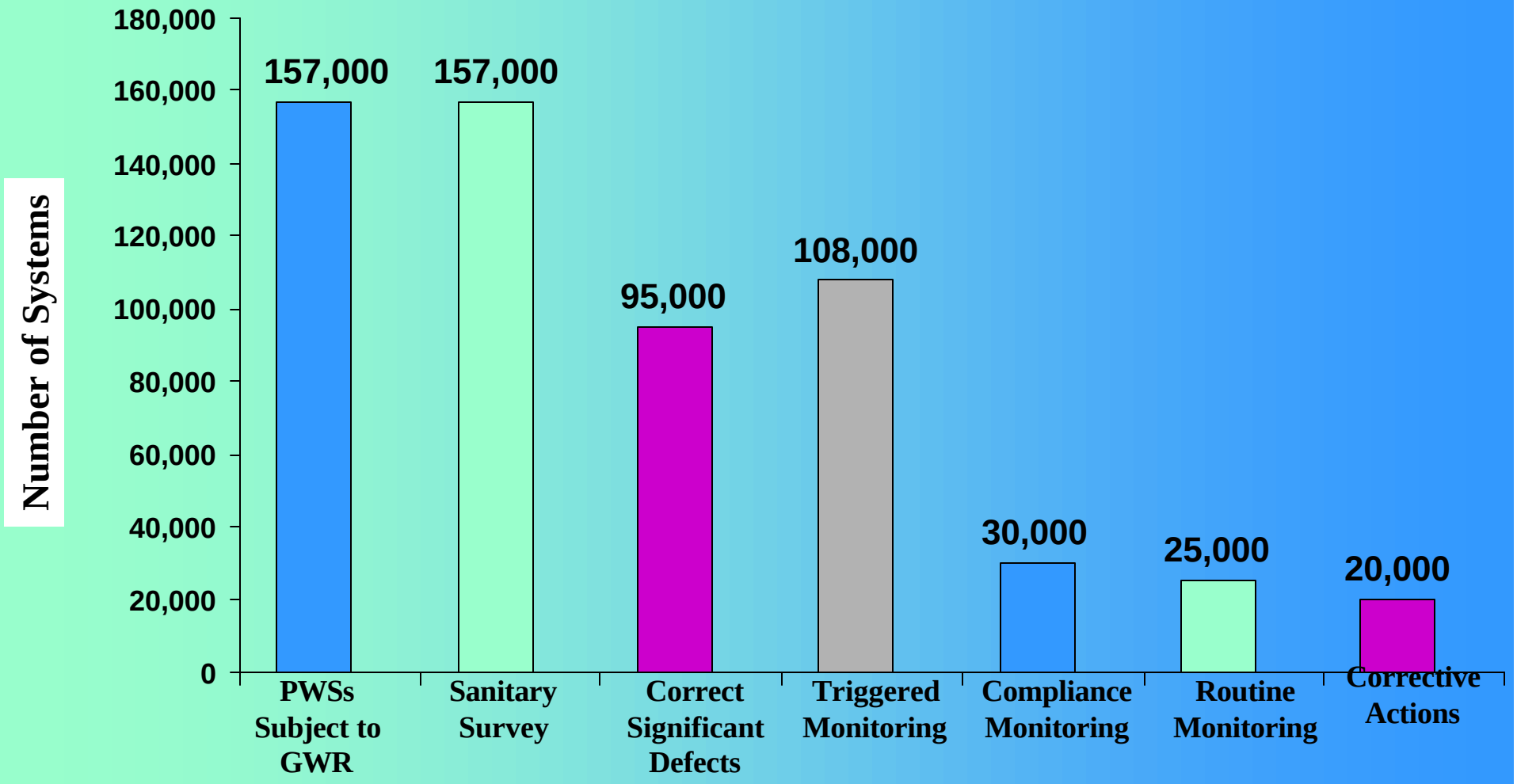
Ground Water Rule (GWR)

- Proposed Rule May 10, 2000 (Aug. 9)
- Final Rule Expected Fall 2000
- Goals
  - Establish a targeted strategy to identify ground water systems susceptible to microbial contamination
  - Establish a protective barrier to prevent microbial illness in ground water systems

GWR Proposed Requirements

- Sanitary Surveys by State to Identify Significant Deficiencies
- Corrective Actions
- Compliance Monitoring for Systems That Disinfect
- For Systems That Do Not Disinfect
  - Hydrogeologic sensitivity assessments
  - Source water monitoring from sensitive aquifers or by systems that have detected fecal indicators in the distribution system

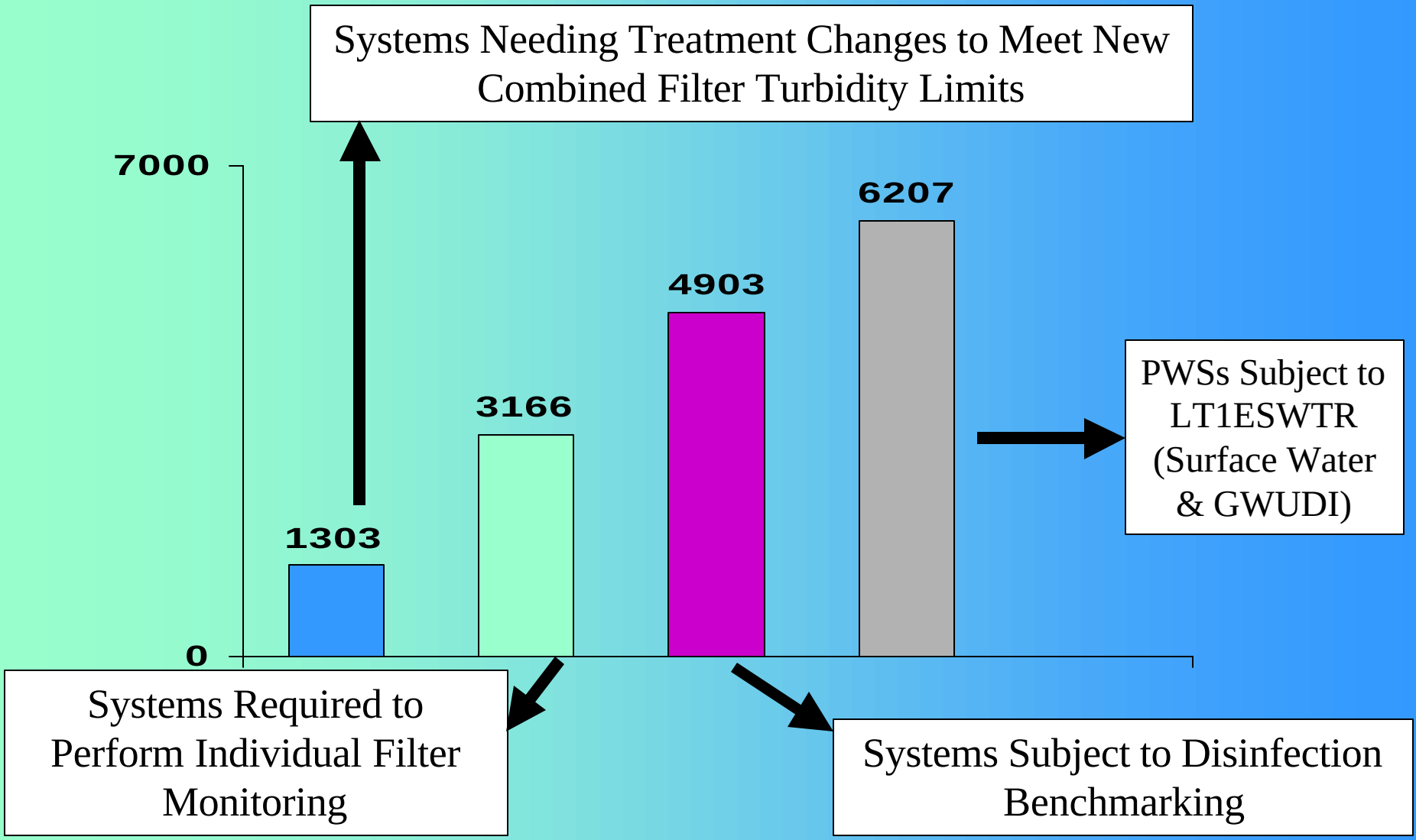
GWR Anticipated Impacts



LT1ESWTR Proposed Requirements

- Applies to Systems < 10,000 Using Surface Water or Ground Water Under Direct Influence (GWUDI)
- Cryptosporidium Removal (99%; 2-log)
- Filter Performance Criteria
- Disinfection Benchmarking
- Source Water Protection to Address Cryptosporidium for Unfiltered Systems
- New Uncovered Reservoirs Prohibited

LT1ESWTR Anticipated Impacts



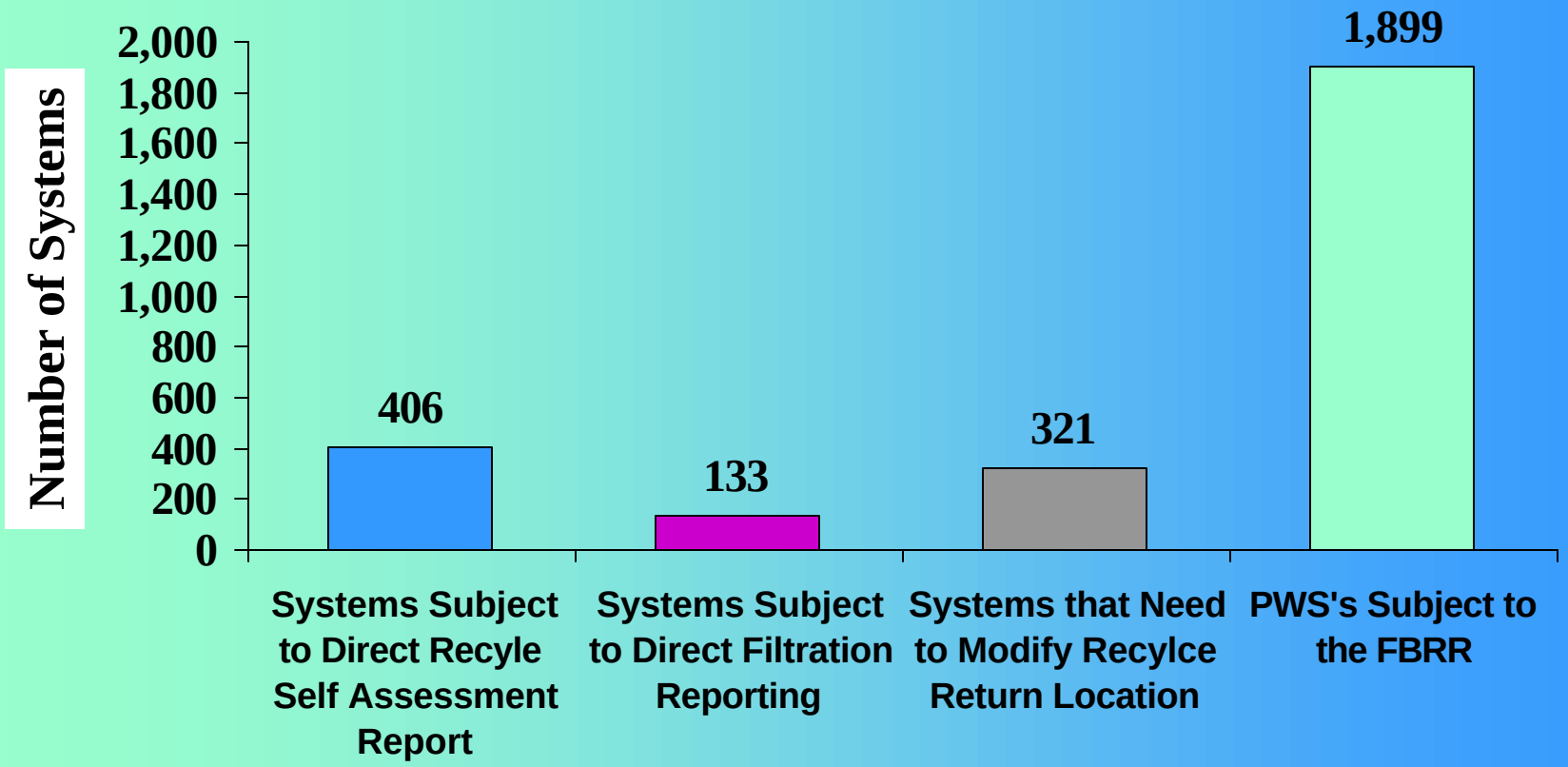
Filter Backwash Recycling Rule (FBRR)

- Incorporated in Proposed LT1ESWTR/FBRR
- Goal
  - Assess and eliminate adverse effects of direct recycling on surface water plants
- Applies to all Surface Water and GWUDI Systems

FBRR Proposed Requirements

- Recycle Prior to the Point of Primary Coagulant Addition (State May Modify)
- Direct Filtration Systems Provide Information to State
- One-month, One-time Recycle Self Assessment for Certain Systems

FBRR Anticipated Requirements



Identify Potential Compliance Actions

RULE	MONITORING	EXISTING TREATMENT PROCESS OPTIMIZATION OR ENHANCEMENT	NEW TREATMENT PROCESS INSTALLATION	MANAGEMENT PRACTICES OPTIMIZATION OR ENHANCEMENT
TCR	X			
SWTR			X	
Phase 1/2/5	X			
Lead & Copper	X		X	
IESWTR	X	X		
LTIESWTR	X	X		
FBRR		X		
LT2ESWTR	X	X	?	
GWR	X			X
Stage 1 DBPR	X	X		
Stage 2 DBPR	X	X	?	
Radon	X			X
Radionuclides	X		?	
Arsenic	X	X	X	
CCR				X
PN				X

Plan Strategically

- Take the Initiative
- Time Is Adequate If You Plan Intelligently
- No Time to Delay Long-term Planning
- It's Only a 'Train Wreck' If You Let It Become One
- It Can Be Done!